



INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Substitute for form 1449A/PTO (Modified)			Complete if Known	
			Application Number	10763,413
			Filing Date	January 23, 2004
			First Named Inventor	SPANGLER, Brenda D.
			Art Unit	1645
			Examiner Name	SWARTZ, Ronald P. Rodney P.
			Attorney Docket Number	A-72072-1 (460930-00007)
Sheet	1	of	8	

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
BPS	A1	4,964,972	10-23-1990	Sagiv et al.	
	A2	5,108,573	04-28-1992	Rubinstein et al.	
	A3	5,156,810	10-20-1992	Ribi	
	A4	5,242,828	09-07-1993	Bergstrom et al.	
	A5	5,294,369	03-15-1994	Shigekawa et al.	
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	A31	6,322,979 B1	11-27-2001	Bamdad et al.	
	A32	6,361,671 B1	03-26-2002	Mathies et al.	

Examiner Signature	<i>R.P. Swartz</i>	Date Considered	9-30-05
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Sheet	2	of	8	Attorney Docket Number	A-72072-1 (460930-00007)

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RP	A33	6,472,148 B1	10-29-2002	Bamdad et al.	
	A34	6,479,240 B1	11-12-2002	Kayyem	
	A35	2002-0009810 A1	01-24-2002	O'Connor et al.	
	A36	2002-0042074 A1	04-11-2002	Bamdad et al.	
	A37	2003-0003473 A1	01-02-2003	Kayyem et al.	
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Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ Number ² Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁴
RP	B1	EP 0 339 821 A1	11-02-1989	United Kingdom Atomic Energy Authority		
	B2	WO 86/05815 A1	10-09-1986	Genetics International, Inc.		
	B3	WO 93/22678 A2/A3	11-11-1993	Massachusetts Institute of Technology		
	B4	WO 94/22889 A1	10-13-1994	Cis Bio International		
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	B7	WO 97/31256 A2/A3	08-28-1997	Cornell Research Foundation, Inc.		
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	B11	WO 98/12539 A1	03-26-1998	Meso Scale Technologies, LLC		
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	B13	WO 98/31839 A2/A3	07-23-1998	Presidents & Fellows of Harvard College		
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	B15	WO 98/51823 A1	11-19-1998	Mosaic Technology		
	B16	WO 99/13109 A1	03-18-1999	Seq Ltd.		

Examiner Signature	RP Swartz	Date Considered	9-30-05
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<i>[Signature]</i>	B17	WO 99/14596 A1	03-25-1999	AB Sangtec Medical		
	B18	WO 99/15893 A1	04-01-1999	Aventis Res. & Technologies GmbH & Co.		
	B19	WO 99/26729 A1	06-03-1999	Universite de Montreal		
	B20	WO 99/29711 A1	06-17-1999	Nanogen, Inc.		
	B21	WO 01/42508 A2	06-14-2001	Motorola, Inc.		
	B22	WO 01/43870 A2	06-21-2001	Motorola, Inc.		

NON PATENT LITERATURE DOCUMENTS						
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<i>[Signature]</i>	C1	AIZAWA, M., et al., "Integrated molecular systems for biosensors," <i>Sens. Actuators B Chem.</i> 24(1&3):1-5 (Mar. 1995).				
	C2	ALBERS, W., et al., "Design of novel molecular wires for realizing long-distance electron transfer," <i>Bioelectrochem. Bioenerg.</i> 42(1):25-33 (Apr. 1997).				
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	C4	BAMDAD, C., "A DNA self-assembled monolayer for the specific attachment of unmodified double - or single stranded DNA," <i>Biophys. J.</i> 75(4):1997-2003 (Oct. 1998).				
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	C8	BRUN, A., et al., "Photochemistry of intercalated quaternary diazaaromatic salts," <i>J. Am. Chem. Soc.</i> 113(21):8153-8159 (Oct. 1991).				
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	C12	CHIDSEY, C., et al., "Coadsorption of ferrocene-terminated and unsubstituted alkanethiols on gold: electroactive self-assembled monolayers," <i>J. Am. Chem. Soc.</i> 112(11):4301-4306 (May 1990).				

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<i>[Signature]</i>	C13	CHIEM, N., et al., "Microfluidic systems for clinical diagnostics," <i>Transducers'97: 1997 Intl. Conf. Solid State Sens. Actuators</i> , Chicago, IL (Jun. 16-19, 1997).		
	C14	COLVIN, V., et al., "Semiconductor nanocrystals covalently bound to metal surfaces with self-assembled monolayers," <i>J. Am. Chem. Soc.</i> 114(13):5221-5230 (Jun. 1992).		
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	C45	McGEE, D., et al., "Novel nucleosides via intramolecular functionalization of 2,2'-anhydrouridine derivatives," <i>Tetrahedron Lett.</i> 37(12):1995-1998 (Mar. 1996).		
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	C47	MICHALITSCH, R., et al., "Properties of self-assembled monolayers (SAMS) from thiol-functionalized oligothiophenes," <i>Adv. Mater.</i> 9(4):321-325 (Apr. 1997).		
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Substitute for form 1449A/PTO (Modified) INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete if Known		
			Application Number	10763,413	
			Filing Date	January 23, 2004	
			First Named Inventor	SPANGLER, Brenda D.	
			Art Unit	1645	
			Examiner Name	SWARTZ, Ronald P. <i>Rodney P.</i>	
Sheet	6	of	8	Attorney Docket Number	A-72072-1 (460930-00007)

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²	
<i>[Signature]</i>	C49	MIR, K., et al., "Determining the influence of structure on hybridization using oligonucleotide arrays," <i>Nat. Biotechnol.</i> 17(8):788-792 (Aug. 1999).		
	C50	MIRSKY, V., et al., "Capacitive monitoring of protein immobilization and antigen-antibody reactions on monomolecular alkythiol films on gold electrode," <i>Biosens. Bioelect.</i> 12(9&10):977-989 (1997).		
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	C54	NAUMANN, R., et al., "Incorporation of membrane proteins in solid-supported lipid layers," <i>Angew. Chem. Int. Ed. Engl.</i> 34(18):2056-2058 (Oct. 1995).		
	C55	NIKOLELIS, D., et al., "Ammonium ion minisensors from self-assembled bilayer lipid membranes using gramicidin as an ionophore. Modulation of ammonium selectivity by platelet-activating factor," <i>Anal. Chem.</i> 68(10):1735-1741 (May 1996).		
	C56	NIWA, M., et al., "Specific binding of concanavalin A to glycolipid monolayers on gold electrodes," <i>J. Chem. Soc. Chem. Commun.</i> 7:547-549 (1992).		
	C57	ORELLANA, G., et al., "Photoinduced electron transfer quenching of excited Ru(II) polypyridyls bound to DNA: the role of the nucleic acid double helix," <i>Photochem. Photobiol.</i> 54(4):499-509 (Oct. 1991).		
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	C59	PANG, D.-W., et al., "Modification of glassy carbon and gold electrodes with DNA," <i>J. Electroanal. Chem.</i> 403(1&2):183-188 (Feb. 1996).		
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	C61	ROJAS, M., et al., "Molecular recognition at the electrode-solution interface, design, self-assembly, and interfacial binding properties of a molecular sensor," <i>J. Am. Chem. Soc.</i> 117(21):5883-5884 (May 1995).		
	C62	RÜCHEL, R.R., "Transmission-electron microscopic observations of freeze-etched polyacrylamide gels," <i>J. Chromatogr. A</i> 166(2):563-575 (Dec. 1978).		
	C63	SABATANI, E., et al., "Thioaromatic monolayers on gold: a new family of self-assembling monolayers," <i>Langmuir</i> 9(11):2974-2981 (Nov. 1993).		
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C65	SANGER, F., et al., "DNA sequencing with chain-terminating inhibitors," <i>Proc. Natl. Acad. Sci. USA</i> 74(12):5463-5467 (Dec. 1997).			
C66	SARGENT, A., et al., "The electrochemistry of antibody-modified conducting polymer electrodes," <i>J. Electroanal. Chem.</i> 470(2):144-456 (Jul. 1999).			

Examiner Signature	<i>R. P. Swartz</i>	Date Considered	9-30-05
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			First Named Inventor	SPANGLER, Brenda D.	
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Sheet	7	of	8	Attorney Docket Number	A-72072-1 (460930-00007)

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<i>[Signature]</i>	C67	SCHLERETH, D., et al., "Self-assembled monolayers with biospecific affinity for lactate dehydrogenase for the electroenzymatic oxidation of lactate," <i>J. Electroanal. Chem.</i> 431(2):285-295 (Jul. 1997).		
	C68	SCHUHMANN, W., et al., "Electron transfer between glucose oxidase and electrodes via redox mediators bound with flexible chains to the enzyme surface," <i>J. Am. Chem. Soc.</i> 113(4):1394-1397 (Feb. 1991).		
	C69	SCHUMM, J., et al., "Iterative divergent/convergent approach to linear conjugated oligomers by successive doubling of the molecular length: A rapid route to a 128 Å-long potential molecular wire," <i>Angew. Chem. Int. Ed. Engl.</i> 33(13):1360-1363 (Jul. 1994).		
	C70	SMALLEY, J., et al., "Kinetics of electron transfer through ferrocene-terminated alkanethiol monolayers gold," <i>J. Phys. Chem.</i> 99(35):13141-13149 (Aug. 1995).		
	C71	SMITH, L., et al., "Mapping and Sequencing the Human Genome: How to Proceed," <i>Biotechnology</i> , 5:933-942 (1987).		
	C72	SMITH, L., et al., "The synthesis and use of fluorescent oligonucleotides in DNA sequence analysis," <i>Meth. Enzymol.</i> 155:260-301(1987).		
	C73	SNEJDÁRKOVÁ, M., et al., "Glucose minisensor based on self-assembled biotinylated phospholipid membrane on a solid support and its physical properties," <i>Bioelectrochem. Bioenerg.</i> 42(1):35-42 (1997).		
	C74	STEINEM, C., et al., "Impedance analysis of supported lipid bilayer membranes: a scrutiny of different preparation techniques," <i>Biochim. Biophys. Acta</i> 1279(2):169-180 (Mar. 1996).		
	C75	STELZLE, M., et al., "On the application of supported bilayers as receptice layers for biosensors with electrical detection," <i>J. Phys. Chem.</i> 97(12):2974-2981 (Mar. 1993).		
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	C77	SUN, S., et al., "Preparation of active Langmuir-Blodgett films of glucose oxidase," <i>Langmuir</i> 7(4):727-737 (Apr. 1991).		
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	C79	THORP, H., et al., "Cutting out the middleman: DNA biosensors based on electrochemical oxidation," <i>Trends Biotechnol.</i> 16(3):117-121 (Mar. 1998).		
	C80	TSUKAHARA, K., "Kinetics and mechanisms of reduction of metmyoglobins. Importance of the geometry change at the heme iron site upon reduction," <i>J. Am. Chem. Soc.</i> 111(6):2040-2044 (Mar. 1989).		
	C81	TURRO, N.J., et al., "Molecular recognition and chemistry in restricted reaction spaces. Photophysics and photoinduced electron transfer on the surfaces of micelles, dendrimers, and DNA," <i>Acc. Chem. Res.</i> 24(11):332-340 (Nov. 1991).		
	C82	TURYAN, I., et al., "Selective determination of CR(VI) by self-assembled monolayer-based electrode," <i>Anal. Chem.</i> 69(5):894-897 (Mar. 1997).		
	C83	WALLACE, W., et al., "Electron transfer of yeast cytochrome c immobilized on sam modified gold electrodes", <i>Book of Abstracts, 214th ACS National Meeting</i> , Las Vegas, NV, PHYS-326, American Chemical Society: Washington, DC (September 7-11 1997).		

Examiner Signature	<i>R P Swartz</i>	Date Considered	9-30-03
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JP	C84	WANG, J., et al., "DNA biosensor for the detection of hydrazines," <i>Anal. Chem.</i> 68(13):2251-2254 (Jul. 1996).	
	C85	WILLNER, I., et al., "Electrical communication between electrodes and NaD(P)+-dependant enzymes using pyrroloquinolinequinon-enzyme electrodes in a self-assembled monolayer configuration: design of a new class of amperometric biosensors," <i>Anal. Chem.</i> 66(9):1535-1539 (May 1994).	
	C86	WOOD, J. C., et al., "Time-frequency transforms: a new approach to first heart sound frequency dynamics," <i>IEEE Transact. Biomed. Eng.</i> 39(7):730-740 (1992).	
	C87	ZEHNER, R., et al., Electrochemical evaluation and enhancement via heterogeneous exchange of the passivating properties and stability of self-assembled monolayers derived from the rigid rod arenethiols, X - C6H4-C≡C6H4-C≡C-C6H4-SH (X = H and F)," <i>Langmuir</i> 13(11):2973-2979 (May 1997).	

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